



LEVELnews

Great Lakes — St. Lawrence River Water Levels

March dry for all Great Lakes

All the Great Lakes had dry conditions in March, after generally wet conditions through the winter. Lake Superior's level fell much more than its average fall in March, levels on Lakes Michigan–Huron and Ontario fell when on average they rise, and Lake Erie rose much less than its average March rise. The levels in the St. Lawrence River at Montreal fluctuated above and below average through the

month, ending the month above average due to rain and snowmelt. Despite the dry conditions, all lakes remained well above average levels.

March monthly lake levels

Monthly means for all the lakes were above average by at least 25 cm in March. Lake Superior was 31 cm above its period-of-record (1918–2017) March monthly mean water level and

15 cm higher than March 2017. Lake Superior's monthly-mean level was the second highest for March on record and 7 cm below the record high set in 1986. Lake Michigan–Huron's mean level in March was 46 cm above average, 23 cm higher than last March's level and the highest since 1997. Lake Erie's mean monthly level was 60 cm above average, 21 cm above the level of the previous March

Great Lakes Water Level Information

Lake	March 2018 Monthly Mean Level		Beginning-of-April 2018 Level	
	Compared to Monthly Average (1918–2017)	Compared to One Year Ago	Compared to Beginning-of-Month Average (1918–2017)	Compared to One Year Ago
Superior	31 cm above	15 cm above	26 cm above	12 cm above
Michigan–Huron	46 cm above	23 cm above	42 cm above	18 cm above
St. Clair	61 cm above	22 cm above	51 cm above	4 cm above
Erie	60 cm above	21 cm above	54 cm above	14 cm above
Ontario	25 cm above	7 cm below	12 cm above	19 cm below

and the highest it has been since 1998. Lake Ontario's March monthly mean level was 25 cm above average and 7 cm lower than the level last year.

Lake level changes

Dry conditions through March kept levels lower in all the lakes. Below average water supplies and higher than average outflow resulted in Lake Superior falling 9 cm through March, a record-high fall for the month, when its average (1918–2017) fall is 1 cm. Lake Michigan–Huron's levels fell 4 cm over March, its second largest fall, when on average it rises 5 cm. Lake Erie levels rose only 9 cm over March compared to its average rise of 14 cm. Lake Ontario fell a record-high 7 cm over March, when on average it rises 14 cm as a result of near-record-high outflows.

Beginning-of-April lake levels

Dry weather through the month of March brought all the Great Lake beginning-of-April levels closer to average values than the previous month and Lake Ontario's levels fell below those seen at the same time last year. Lake Superior's beginning-of-April level was 26 cm above average (1918–2017), 12 cm above the level at this time last year and the highest it has been since 1997. Lake Michigan–

Huron's beginning-of-April level was 42 cm above average, 18 cm higher than last year and the highest it has been since 1998. Lake Erie was 54 cm above average at the beginning of April, 14 cm higher than its level this time last year and the highest it has been since 1998. Lake Ontario's level at the start of April was only 12 cm above average as it levels continued to approach average values from the record highs seen in May 2017. Lake Ontario's level was also 19 cm lower than the same time last year, the first time this has happened since the beginning-of-January 2017. At the beginning of April, all of the lakes were at least 29 cm above their chart datum level.

Ice conditions on lakes

A cool March and beginning of April kept ice hanging on in the Great Lakes with nearly 20% ice cover on the lakes in the week of April 9, when the average is less

than 5% for this time of year. More information on Great Lakes ice conditions can be found on the Canadian Ice Service web site at: <https://www.canada.ca/en/environment-climate-change/services/ice-forecasts-observations/latest-conditions.html>.

Water levels forecast

Looking ahead to spring and summer water levels, it is likely that levels in all of the Great Lakes except Lake Ontario will continue to be well above average based on their beginning-of-April levels and past conditions on the lakes (1918–2017). If conditions are dry for Lake Ontario it could fall below average levels as soon as early summer. Relative to their beginning-of-April levels and assuming average water supply conditions, all the Great Lakes are expected to rise through April. Everyone around the Great Lakes should be prepared for

March Precipitation over the Great Lakes*

Great Lakes Basin	52%	Lake Erie	87%
Lake Superior	28%	(including Lake St. Clair)	
Lake Michigan–Huron	45%	Lake Ontario	68%

March Outflows from the Great Lakes*

Lake Superior	135%	Lake Erie	124%
Lake Michigan–Huron	130%	Lake Ontario	133%

*As a percentage of the long-term March average.
NOTE: These figures are preliminary.

higher water levels due to the lakes seasonal spring level rises, as average spring water supplies are greater than those through the winter months. For a graphical representation of recent and forecasted water levels on the Great Lakes, refer to the Canadian Hydrographic Service's monthly water levels bulletin at:

<http://tides-marees.gc.ca/C&A/bulletin-eng.html>.

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ISSN 1925-5713

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